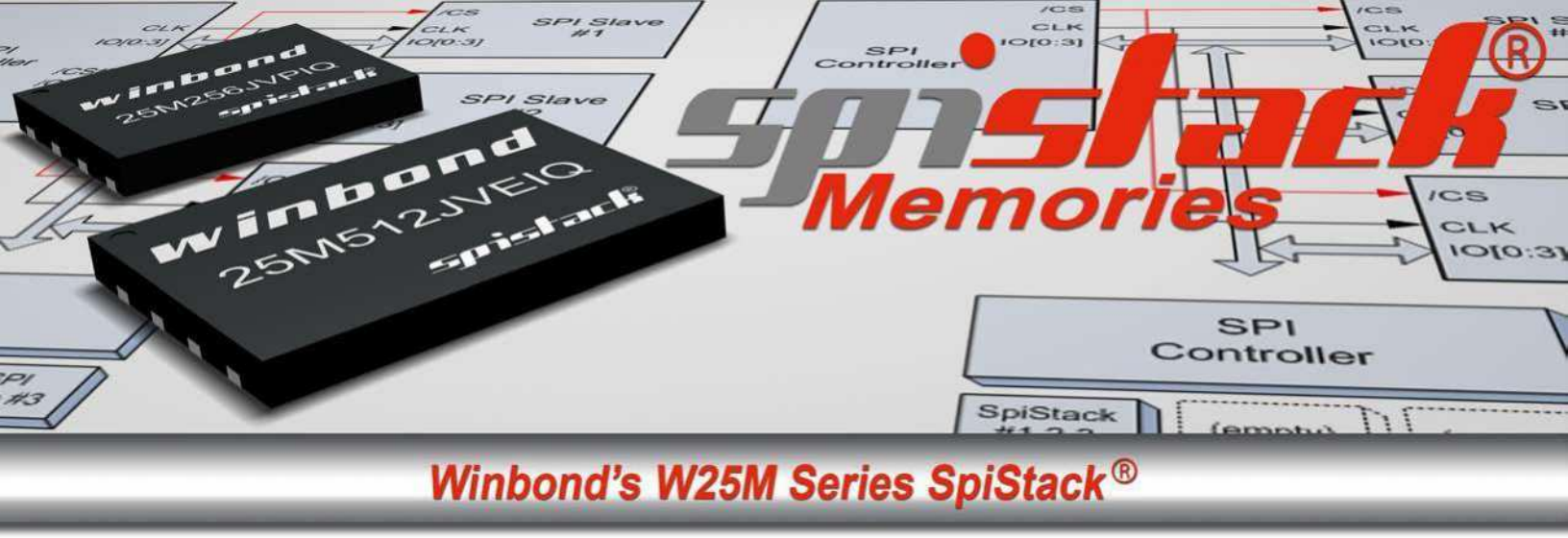
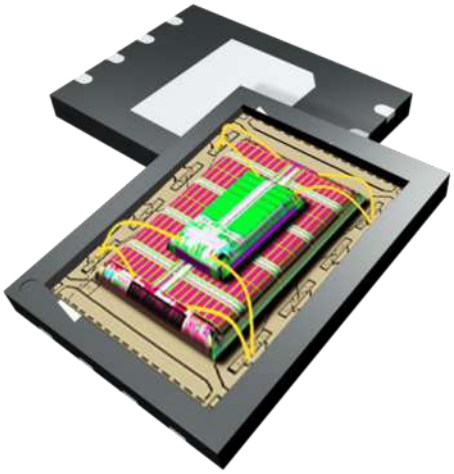
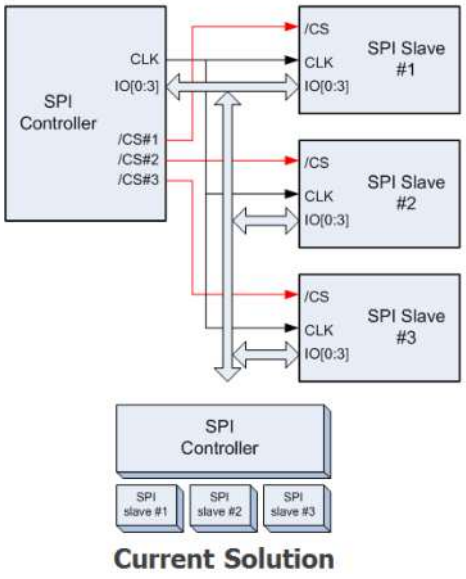


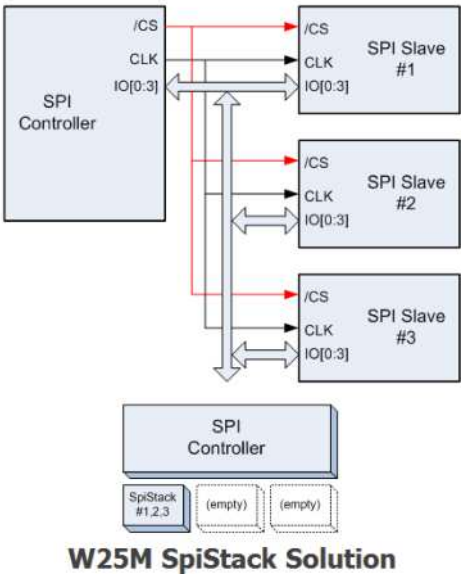
Winbond's W25M Series SpiStack®

Winbond is the first company to offer the new SpiStack® W25M Memory Series for "stacking" of homogeneous or heterogeneous flash, thus achieving memories of varying densities for code and data storage, while providing designers with flash solutions most appropriate for their design requirements. SpiStack® architecture offers designers maximum flexibility in tailoring flash solutions to meet their specific memory-density and application requirements. The W25M Series provides a wide range of densities in the well-established 8-pin package to which designers are accustomed. W25M memories also feature the popular, multi-IO SpiFlash® interface featuring the popular Serial Peripheral Interface (SPI) and command set.





Current Solution



W25M SpiStack Solution

W25M SpiStack® Family

- Stack flash dies to form a higher density part of choice
- User can select based on specific density requirement
- Serial Peripheral Interface (SPI)
- Backward compatible to existing SpiFlash®

Homogeneous stacking – Two or more dies

- NOR dies for random access and high reliability
- NAND dies for large density and high write speed

Heterogeneous stacking – Two or more dies

- NOR and NAND dies stacked together

Concurrent Operation

- Read operation on one die +
  Write / Erase operation on another die
- Code execution not interrupted for data updates

Wide Range of Applications

- Mobile phones, Cameras, Printer, Servers, Set Top Box Automotive, Bluetooth, GPS, Digital-TV, DSP, FPGA WLAN, DSL/Cable Modem, Gateway, Industrial and more

winbond



Winbond SpiStack® Selection Guide

S-NAND Density	S-NOR Density	Winbond Part #[2]	Voltage	Package[3]
1Gb	16Mb	W25M161AVxIT	3V	x=(E, B, F[4])
	16Mb	W25M161AWxIT	1.8V	x=(E, B, F[4])
	32Mb	W25M321AVxIT	3V	x=(E, B, F[4])
	32Mb	W25M321AWxIT	1.8V	x=(E, B, F[4])
	64Mb	W25M641AVxIT	3V	x=(E, B, F[4])
	128Mb	W25M121AVxIT	3V	x=(E, B, F[4])
2Gb (2x1Gb)	--	W25M02GVxxIT	3V	xx=(ZE, TB)
		W25M02JWxxIT	1.8V	xx=(ZE, TB)
--	512Mb (2x256Mb)	W25M512JVxIQ	3V	x=(E, B, F[4])
		W25M512JWxIQ	1.8V	x=(E, B)

1. See data sheet for further technical information. This is subject to change without notice. 2. At the end of the part number, letter “T” represents "Green", Halogen Free and RoHS compliant packaging and Continuous Read mode as default (BUF=0); letter “Q” represents Green packaging and Quad Enabled as shipping default; letter “I” represents Industrial Temperature (-40°C to +85°C). 3 ZP or P=WSON8 6x5mm, ZE or E=WSON8 8x6mm, TB or B=TFBGA24 8X6mm (5X5 Matrix), SF or F=SO16 300mil. 4. Special Order.



winbond

Corporate Headquarter
No. 8, Keya 1st., Daya Dist., Taichung City 428, Taiwan
Tel: 886-4-25218168
Email: mkt_online@winbond.com

Winbond Electronics Corporation America
2727 North First Street, San Jose, CA 95134, U.S.A.
Tel : 1-408-943-6666

Version: Aug.2021

www.winbond.com